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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,076	03/17/2005	Yoshihiko Takano	2005_0441A	2664
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W.			EXAMINER	
			LI, MEIYA	
SUITE 800 WASHINGTON, DC 20006-1021			ART UNIT	PAPER NUMBER
			2811	
			MAIL DATE	DELIVERY MODE
			11/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

· · · · · · · · · · · · · · · · · · ·					
	Application No.	Applicant(s)			
	10/528,076	TAKANO ET AL.			
Office Action Summary	Examiner	Art Unit			
	Meiya Li	2811			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become AB ANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
·	Responsive to communication(s) filed on 10 August 2005.				
; <del>_</del>	·				
,	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>1-4</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	vn from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-4</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9)⊠ The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
	- Jan	Hunly			
		NE GURLEY RY PATENT EXAMINER			
Attachment(s)		11, TC 2860			
1) Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413)				
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail D 5) Notice of Informal F				
Paper No(s)/Mail Date <u>3/17/05</u> , <u>6/17/05</u> .	6) Other:				

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## **DETAILED ACTION**

#### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

- 2. The information disclosure statement filed March 17, 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.
- 3. The information disclosure statement (IDS) submitted on June 17, 2005 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### Specification

4. The disclosure is objected to because of the following informalities: Undefined acronyms, such as "SFQ" and "SQUID" (page 1, lines 11-12). The examiner suggests that applicant spell out all the acronyms when using them for the first time in the specification.

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5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

## Claim Objections

6. Claims 1-4 are objected to under 37 CFR 1.75(e) because they fail to include a preamble in the independent claim. Appropriate correction is required.

# Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Takano et al. (Pub. # US 2002/0025586 A1, published on February 28, 2002).

As for claim 1, Takano et al. shows ([0029]-[0035]; [0037]-[0039]) a high temperature superconductive Josephson junction, wherein two single crystals of a high temperature superconductor are bonded on a substrate in a range of intersecting angles of 0 degree to 90 degrees, a single high temperature superconductive Josephson tunnel junction is formed in a bonded portion, and a plasma frequency of the high temperature superconductive Josephson tunnel junction varies depending on an intersecting angle.

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As for claim 2, the two single crystals are any one of a whisker, a finely processed single crystal and a thin film, or a combination of two types of them ([0029], lines 5-8).

As for claim 3, the high temperature superconductor is a bismuth compound and its superconductive phase is any one of 2212 phase, 2201 phase and 2223 phase, or a combination of two or more types of them ([0032], line7-12).

As for claim 4, the high temperature superconductor is a bismuth compound and its superconductive phase is any one of 2212 phase, 2201 phase and 2223 phase, or a combination of two or more types of them ([0032]).

#### Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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10. Claims 1-4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, and 6-8 of U.S. Patent No. 6,682,621. Although the conflicting claims are not identical, they are not patentably distinct from each other because issued claims discloses the claimed invention except for a single high temperature superconductive Josephson tunnel junction is formed in a bonded portion, and a plasma frequency of the high temperature superconductive Josephson tunnel junction varies depending on an intersection angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made for a single high temperature superconductive Josephson tunnel junction is formed in a bonded portion, and a plasma frequency of the high temperature superconductive Josephson tunnel junction varies depending on an intersection angle since it was known in the art that Josephson characteristic, i.e., frequency is controlled by changing changing a cross angle of the high temperature superconductors (also, see Ref. U).

#### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the PTO Form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meiya Li whose telephone number is (571) 270-1572. The examiner can normally be reached on Monday-Friday 7:30AM-5:00PM Eastern Standard Time.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Gurley can be reached on (571) 272-1670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML 10/25/2007

SUPERVISORY PATENT EXAMINER
AV 28 11, TC 28 60